## MATERIAL SAFETY DATA SHEET

Date Printed: 06/05/2009 Date Updated: 01/30/2006 Version 1.3

SARA 313

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Section 1 - Product and Company Information
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Product Name GAMMA-L-GLUTAMYL-L-ALANINE, 98% 483834 Product Number

Brand ALDRICH

Sigma-Aldrich Canada, Ltd Company Address 2149 Winston Park Drive Oakville ON L6H 6J8 CA Technical Phone: 9058299500

9058299292 Fax: 800-424-9300 Emergency Phone:

Section 2 - Composition/Information on Ingredient

Substance Name CAS # GAMMA-L-GLUTAMYL-L-ALANINE, 98% 5875-41-2

C8H14N2O5 Formula

Section 3 - Hazards Identification

Section 4 - First Aid Measures

For additional information on toxicity, please refer to Section 11.

ORAL EXPOSURE If swallowed, wash out mouth with water provided person is

conscious. Call a physician.

INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

In case of contact, immediately wash skin with soap and copious amounts of water.

DERMAL EXPOSURE

EYE EXPOSURE

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Section 5 - Fire Fighting Measures FLASH POINT

N/A

N/A

FLAMMABILITY

appropriate foam.

heavy rubber gloves.

AUTOIGNITION TEMP

EXTINGUISHING MEDIA Suitable: Water spray. Carbon dioxide, dry chemical powder, or

N/A

FIREFIGHTING Protective Equipment: Wear self-contained breathing apparatus

PROCEDURE(S) OF PERSONAL PRECAUTION(S) Wear respirator, chemical safety goggles, rubber boots, and

and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions.

METHODS FOR CLEANING UP Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material

Section 6 - Accidental Release Measures

pickup is complete. Section 7 - Handling and Storage

and clothing. Avoid prolonged or repeated exposure.

User Exposure: Avoid inhalation. Avoid contact with eyes, skin,

STORAGE Suitable: Keep tightly closed. Store in a cool dry place.

Section 8 - Exposure Controls / PPE

BP/BP Range

Freezing Point Vapor Pressure Vapor Density

Solvent Content

Surface Tension

Viscosity

Flash Point

Evaporation Rate

Decomposition Temp.

Explosion Limits Flammability

Autoignition Temp

Saturated Vapor Conc. N/A

Partition Coefficient N/A

MP/MP Range

ENGINEERING CONTROLS

HANDLING

Safety shower and eye bath. Mechanical exhaust required. PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN

(EU). Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges.

Eye: Chemical safety goggles. GENERAL HYGIENE MEASURES

Hand: Compatible chemical-resistant gloves.

N/A

N/A

N/A

N/A

N/A

N/A

N/A

N/A

reuse. Section 9 - Physical/Chemical Properties Molecular Weight 218.21 AMU N/A

188.0 − 192.0 °c

Wash thoroughly after handling. Wash contaminated clothing before

Bulk Density N/A Odor Threshold N/A Volatile% N/A

ALDRICH - 483834 www.sigma-aldrich.com Page 2 VOC Content N/A Water Content

Refractive Index Optical Rotation N/A N/A Miscellaneous Data Solubility N/A N/A = not available Section 10 - Stability and Reactivity STABILITY Materials to Avoid: Strong oxidizing agents. HAZARDOUS DECOMPOSITION PRODUCTS Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides. Section 11 - Toxicological Information ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation. Eye Contact: May cause eye irritation.

Section 13 - Disposal Considerations APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Section 12 - Ecological Information

Section 14 - Transport Information

Section 15 - Regulatory Information

UNITED STATES REGULATORY INFORMATION

CANADA REGULATORY INFORMATION

Section 16 - Other Information

Proper Shipping Name: None

upper respiratory tract.

SIGNS AND SYMPTOMS OF EXPOSURE

skin absorption.

No data available.

regulations.

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transport.

NDSL: No

DISCLAIMER

SARA LISTED: No

DOT

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport. IATA

Non-Hazardous for Air Transport: Non-hazardous for air

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Inhalation: Material may be irritating to mucous membranes and

toxicological properties have not been thoroughly investigated.

Dissolve or mix the material with a combustible solvent and burn

in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental

Multiple Routes: May be harmful by inhalation, ingestion, or

To the best of our knowledge, the chemical, physical, and

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR. DSL: No

purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any

paper copies for internal use only.

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